

REMARKS

In the Office Action, the Examiner rejected claims 1-6, 9-11, 14-16, 22-36, 39-44, 48, and 49 under 35 U.S.C. §103(a) as being unpatentable over the Ando patent in view of the Egol material.

Independent claim 1 is directed to a method of estimating purchases made by customers of a supplier of interest from other suppliers, and the method is performed on a computer. According to the method, reading panelist data regarding purchases made by panelists from the supplier of interest and from the other suppliers are read.

The panelists are a subset of the customers. A relationship between the purchases made by the panelists from the supplier of interest and the purchases made by the panelists from the other suppliers is determined. Customer data regarding purchases made by the customers from the supplier of interest are read. Based upon the customer data and the relationship, the purchases made by the customers from the other suppliers are estimated.

The Ando patent discloses various arrangements for forecasting demand. For example, the Ando patent discloses in column 1, lines 19-30 that, according to one demand forecasting system, a fuzzy operation is applied to sales results that include the sales demand of individual products, the component ratio of the sales, and profit rate

in order to calculate an index showing the ease of sales promotion of individual products. The fuzzy operation is based on the knowledge of an expert in sales plans and an analysis of the fluctuation in the trend of sales.

The Ando patent further discloses in column 1, lines 31-45 that, according to another demand forecasting system, the sales of each product is collected from a sample shop. The sample shop is extracted from plural shops. Then, the sales in all shops is presumed from the sales in the sample shop on the basis of the ratios of the sales in the sample shop to the sales in all shops and the characteristics of commodities of the sample shop (price zone, target customer age, selling technique etc.). Sales transition patterns of plural types and of final sales are estimated on the basis of the past transition of sales results. The estimated sales transition patterns and final sales are stored. A pattern similar to the estimated transition pattern of sales of all shops is selected from the stored sales transition patterns, and the estimated final sales is regarded as the estimated sales of the commodities, and production is planned accordingly.

The Ando patent concludes in column 1, lines 46-63 that, in these demand forecasting systems, demand is forecasted by analyzing the trend of past sales, and that the main goal of such systems is to apply statistical analysis techniques and econometric modeling. However, if

product trends change in short cycles, the data used in analysis rapidly becomes old and the precision of the forecasts suffers. In order to maintain a high degree of precision for the forecast, maintenance of the forecasting software, maintenance of the knowledge, and maintenance of the conditions are required frequently. Such maintenance is difficult.

The Ando patent discloses in column 1, line 66 through column 3, line 3 that its invention is intended to solve these problems by storing a plurality of models of neural networks including a model that forecasts demand from data of the past several months, a model that forecasts demand from data of the same period of the previous year, and a model that forecasts demand from both the latest data and data of the same period of the previous year. Sales are fed into a model so that the model learns during a short period of time, such as weekly, to predict demand depending on sales trends.

As can be seen, the Ando patent discloses various arrangements for forecasting demand. However, as explained in previous responses, demand forecasting is not relevant to the invention of independent claim 1 for at least two reasons.

First, independent claim 1 is limited to estimating past sales, whereas demand forecasting predicts future sales.

Second, demand forecasting does not focus on the customers of a particular product supplier as required by independent claim 1, but rather focuses on consumers as a whole or on one or more segments of consumers (such segments may be defined by age, sex, income, etc.).

Moreover, the Examiner asserts that the Ando patent discloses the collection of data regarding the purchases from a supplier of interest (the sample shop) and the collection of data regarding the purchases from other suppliers (plural shops). This assertion is an inaccurate representation of the Ando patent. The sample shop is merely a representation (a sort of average) of the plural shops. The sample shop does not have data that it has generated on its own; rather, its data is derived from the plural shops. It has no identity that is separate from the plural shops. In fact, the sample shop does not exist. It is merely a mathematical model of the plural shops.

Thus, for example, the Ando patent specifically discloses at column 1, lines 32 and 33 that the sample shop is extracted from the plural shops. Accordingly, rather than storing the data from many shops, the plural shops may be represented by a single sample shop and by the ratios that describe the relationship between the sales of the sample shop and the sales of the actual shops.

Thus, the data of the sample shop is a subset of the data of the plural shops and is not independent of the

data from the plural shops. Accordingly, the sample shop, in the words of independent claim 1, does not represent a supplier of interest, but merely represents a statistically smaller embodiment of the other suppliers. No single supplier is segmented out as the supplier of interest. There is no supplier of interest disclosed in the Ando patent.

Accordingly, the sample shop is not a supplier of interest, but is only a representation of the other suppliers.

Furthermore, if sales from the sample shop and from the plural shops are used in the method of independent claim 1 as suggested by the Examiner, the method of independent claim 1 would not work. The method of independent claim 1 is to determine the purchases made by the customers of a supplier of interest from other suppliers when all that is known is (i) the purchases made by customers of the supplier interest from the supplier of interest and (ii) the purchases made by a subset of the customers of the supplier interest from the supplier of interest and from other suppliers.

The data that the Examiner is using, however, includes only the purchasers made from the other suppliers (i.e., the plural shops) and a subset of these purchases (i.e., the sample shop). Thus, this data cannot be used by itself to determine the purchases made by one of the plural

shops from the other shops. Indeed, there is no disclosure in the Ando patent that the data of one supplier is segmented out from the data of the plural shops so that it can be used to establish the relationship recited in independent claim 1. The data of the sample shop certainly does not represent this data because the sample shop data merely represents the plural shops. Therefore, the data that the Examiner is using cannot be used to implement the invention of independent claim 1.

In addition, because the sample shop is merely a subset of the data provided by the plural shops, the ratio of the sample shop data to the plural shop data does not yield the relationship recited in independent claim 1.

Also, the Examiner recognizes that the Ando patent does not disclose the use of a panel to acquire panelist data. Therefore, the Examiner cites the Egol material. The Egol material describes a survey in which 1000 customers of a supplier are questioned about the two things that these customers consider most important about purchasing products. The 1000 customers of the supplier are also questioned about the purchases that they make from other suppliers. This information is used to determine the appeal of new product offerings to the customers of the supplier of interest. The Examiner incorrectly concludes from this description that purchases from the other suppliers by the customers of the supplier of interest are

being estimated. They are not. This data is only being used to determine the appeal of new product offerings.

Moreover, if it assumed that the 1000 customers is a subset of the larger customer base of the supplier of interest, then the Egol material contains no description of collecting data from both the 1000 customers and the larger customer base.

The Examiner points to lines 19, 21, and 22 of the Egol material as disclosing that the survey answers are used to estimate the purchases from the other suppliers by the customers of the supplier of interest. Instead, this portion of the Egol material merely discloses that 1000 customers of a supplier are questioned about the two things that the customers consider most important about purchasing products and that these same customers are also questioned about the purchases that they make from other suppliers. There is no disclosure in the Egol material of estimating the purchases from other suppliers by the customers of a supplier of interest. To the contrary, the Egol material is directed to determining the appeal of new product offerings.

Also, the Egol material does not suggest modifying the sample shop as disclosed in the Ando patent so that the sample data is independent of the plural shops.

For example, the Egol material does not disclose that data is collected from the 1000 customers regarding the

purchases they make from the supplier of interest. The Egol material merely describes that the 1000 customers are questioned about the two things that these customers consider most important about purchasing products.

Also, the Egol material is directed to determining product appeal and the Ando patent is directed to demand forecasting. Thus, neither patent is related to the invention of independent claim 1 and, therefore, neither reference suggests a combination that would meet the invention of independent claim 1.

Accordingly, because neither the Ando patent nor the Egol material disclose estimating the purchases from other suppliers by the customers of an independent supplier of interest, the combination of the Ando patent and the Egol material cannot teach the invention of independent claim 1.

Moreover, because the Ando patent merely relates to demand forecasting and the Egol material merely relates to determining new product appeal, the combination of the Ando patent and the Egol material cannot teach estimating the purchases from other suppliers by the customers of an independent supplier of interest as recited in independent claim 1.

Also, because the Ando patent does not disclose an independent supplier of interest, a premise of the

Examiner's rejection is incorrect and the rejection must, therefore, fail.

For all of the reasons give above, independent claim 1 is not unpatentable over the Ando patent in view of the Egol material.

Examiner's Response - The Examiner characterizes applicants' arguments as first, second, and third arguments. Applicants use the Examiner's characterization herein only as a matter of convenience.

In the Examiner's response to the first argument, the Examiner discusses past and future sales. Applicants made this distinction merely to point out that the Ando patent and independent claim 1 are directed to entirely different inventions.

To be sure, the Ando patent discusses the use of past sales. Past sales data is gathered from the plural shops, those sales are distilled down in amount to set up the sample shop, and then ratios between the data for the sample shop and the data for the plural shops are established. The Ando patent also discusses formulating sales transition patterns (trends) on the basis of past transition patterns of sales, and selects one of the patterns similar to the transition pattern of the plural shops. The Ando patent concludes its discussion of the prior art sample shop scenario by stating that production is planned accordingly. In other words, the ratios and the

selected trend are used to forecast demand so that production can be planned based on that forecasted demand.

Thus, the past sales are used to forecast future sales.

By contrast, according to the invention of independent claim 1, past sales to the panelists are gathered. These sales include purchases made by the panelists from the supplier of interest and purchases made by the panelists from the other supplier. A relationship between the purchases made by the panelists from the supplier of interest and the purchases made by the panelists from the other suppliers is determined. Past sales made by the supplier of interest to the customers of the supplier of interest are plugged into this relationship in order to determine the past sales that these customers of the supplier of interest made from the other suppliers.

Thus, retailer A, for example, can determine what its customers are purchasing from its competitors.

Demand forecasting such as taught by the Ando patent looks at past sales in order to forecast future sales. It does not distinguish one supplier from any other supplier. Therefore, demand forecasting cannot tell a supplier what purchases its customers have made from other suppliers. Similarly, because the sample shop is a cross-section of the plural shops, the data of no one shop is segmented out. Therefore, the sample shop prior art method disclosed in the Ando patent cannot be used to tell a

supplier what purchases its customers have made from other suppliers.

As can be seen, the prior art sample shop scenario disclosed in the Ando patent does not disclose or suggest the invention of independent claim 1.

In the Examiner's response to the second argument, the Examiner continues the assertion that the sample shop is the supplier of interest. It is not. Independent claim 1 makes a distinction between the supplier of interest and the other suppliers. That is, the supplier of interest is not one of the other suppliers, it is not part of the other suppliers, and its data does not depend on the data of the other suppliers. This distinction is consistent with the definitions set out in the specification of the present application.

By contrast, the sample shop represents a part of each of the plural shops. The sample shop is not an entity that is separate from the plural shops. Instead, the sample shop comprises a piece of each of the plural shops.

In essence, the sample shop is a statistical formulation of the plural shop so that less data can be used to formulate the demand forecast than if all data from all of the plural shops are used. The data of the sample shop, therefore, is dependent on the data of the plural shops.

Therefore, the Ando patent does not teach a supplier of interest as recited in independent claim 1.

In the Examiner's response to the third argument, the Examiner asserts that the Egol material teaches the use of data from the customers of a supplier of interest and from a subset of those customers. This assertion is incorrect. The Egol material merely discloses that 1000 customers of jeweler are surveyed about the jeweler and about other jewelers. The Egol material does not disclose or suggest also gathering data from more than the 1000 customers. Accordingly, the Egol material does not disclose or suggest the two different groups recited in independent claim 1, i.e., the customers, and the panelists formed as a subset of the customers.

Moreover, the purpose of the survey is to determine what new product offerings should be made. The Egol material does not disclose or suggest determining the purchases of the customers of the jeweler from other jewelers based on the purchases of a subset of those customers from the jeweler and from the other jewelers.

Accordingly, because neither the Ando patent nor the Egol material discloses or suggests determining the purchases of the customers of a supplier of interest from other suppliers based on the purchases of a subset of those customers from the supplier of interest and from other suppliers, independent claim 1 is patentable over the Ando patent in view of the Egol material.

Independent claim 30 is directed to a method of estimating purchases made by customers of a supplier of interest from other suppliers. According to the method, customer data regarding purchases made by the customers from the supplier of interest are read, and panelist data regarding purchases made by panelists from the supplier of interest and from the other suppliers are also read. The panelists are a subset of the customers. Purchases made by the customers from the other suppliers are estimated based upon the customer data and the panelist data.

As discussed above, neither the Ando patent nor the Egol material suggests an arrangement for estimating past sales. Also, neither the Ando patent nor the Egol material suggests collecting and processing data in order to estimate purchases made by customers of a supplier from other suppliers based on data from those customers and from a subset of those customers.

Accordingly, independent claim 30 is not unpatentable over the Ando patent in view of the Egol material.

Examiner's Response - See above.

Independent claim 39 is directed to a method in which purchases made by customers of a supplier of interest are estimated. A linear relationship between purchases made by panelists from the supplier of interest and purchases made by the panelists from the other suppliers is

determined, and purchases by the customers from the other suppliers are estimated based upon the linear relationship.

Neither the Ando patent nor the Egol material suggests an arrangement for estimating past sales. Also, neither the Ando patent nor the Egol material suggests collecting and processing data to estimate purchases made by customers of a supplier of interest based on data from panelists.

Accordingly, independent claim 39 is not unpatentable over the Ando patent in view of the Egol material.

Examiner's Response - See above.

Independent claim 43 is patentable over the Ando patent and the Egol material for similar reasons.

Examiner's Response - See above.

CONCLUSION

In view of the above, the claims of the present application patentably distinguish over the art applied by the Examiner. Accordingly, allowance of these claims and issuance of the present application are respectfully requested.

Respectfully submitted,

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